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## REDISCOVERY AND REDESCRIPTION OF THE MOTH LITHOPHANE VANDUZEEI (BARNES),

WITH NOTES ON THE TYPE LOCALITY (LEPIDOPTERA: NOCTUIDAE).

JOHN S. BUCKETT

and

## RONALD H. LEUSCHNER

University of California, and 14008 S. Spinning Ave., Gardena, Calif.

In recent years specimens of Lithophane vanduzeei (Barnes) have been collected at the type locality, Carmel, Monterey County, California. This species was described from two specimens collected by L. S. Slevin in the winter of 1926 and 1927, and until recently, the species was known from only the holotype, one paratype and an additional specimen. The holotype and one additional specimen are contained in the California Academy of Sciences, San Francisco, and the single paratype was retained by Barnes at the time of the original description and is now contained in the collection of the United States National Museum.

In the original description, Barnes indicated the relationship of vanduzeei within the genus by stating "Allied to, and should be listed next to, lepida Lintner." Benjamin (1935) placed vanduzeei as a subspecies of lepida, based on his opinion that "The genitalia do not indicate a species distinct from lepida." McDunnough (1938) considered vanduzeei to be a distinct species and placed it after nasar (Smith). Whatever the case, it is clearly beyond the scope of this paper to review this group of species at the present time. It is the authors' present opinion that vanduzeei should be considered a distinct species, and until the results of the current study of this group by Franclemont are published, no absolute relationships will be known concerning vanduzeei and other closely related species.



Fig. 1 Lithophane vanduzeei, male. Carmel, Monterey County, California, 4 April 1965 (R. H. Leuschner).

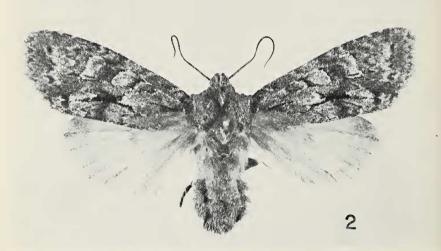


Fig. 2 *L. vanduzeei*, female. Same locality and collector as preceeding, 30 December 1962.

L. vanduzeei, like other species in the genus, has an extended period of emergence, or else exhibits hibernation, some specimens having been collected in December, and others collected as late as April. The type locality is a heavily forested area, the predominent trees being Monterey Pine (Pinus radiata Don.), Coast Live Oak (Quercus agrifolia Nee), Madrono (Arbutus menziesii Pursh.), shrubs, and other low growing plant species. This area like other coastal areas of central California is quite frequently shrouded in fog, and the mean temperature through the winter months is generally in the range of 40°F. to 50°F.

## Lithophane vanduzeei (Barnes)

Graptolitha vanduzeei Barnes, 1928. Pan Pacific Ent. 5(1):9. Topotype male: Ground color of primaries charcoal, secondaries pinkish brown. Head with vertex clothed in black, white forked hairs and spatulate scales, vestiture forming two porrect tufts; area between antennae clothed in short spatulate scales; from clothed as in vertex but without porrect tufts; palpi clothed in dirty whitish flattened scales and divided hairs; antennae dorsally clothed in silvery-white scales, ventrally fasciculate, or each flagellomere possessing a cluster of hairs; eyes weakly lashed. Thorax with collar tricolor, basally charcoal, preapically black banded, apically silvery-white tipped; disc of ground color, but possessing a few brown scales; anterior tuft divided, composed of elongate scales and forked hairs; posterior tufts weak, colored as in anterior tufts; ventral surface clothed in light grey; legs with tarsi weakly black and white banded; tarsal claws apparently not bifid, tended by stiff bristles; primaries with ordinary lines poorly defined, but distinguishable on some specmens; basal innermarginal region tan; basal half line proximally blackish, distally whitish; black basal dash thin, but prominent; transverse anterior line hardly discernable; transverse anterior area sprinkled with white scales: median shade dark: orbicular rectangular, outlined in black, centrally sprinkled with white; reniform rectangular, constricted medially, colored as in orbicular; prominent black scaling present on Cu2 from transverse anterior line to transverse posterior line (as in fig. 1); subterminal line represented by blackish scalation; subterminal area silvery with medial veins outlined in black and white; terminal darker than subterminal area; terminal line represented faintly as black lunules between veins; ventral surface basally brownish, grading into grey terminally; reniform dark brown; secondaries dorsally

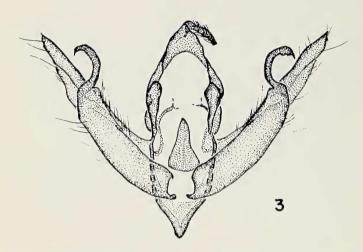


Fig. 3 L. vanduzeei, male genitalia minus aedeagus. Same data as in fig. 1 (Bauer-Buckett slide No. 66D11-1).

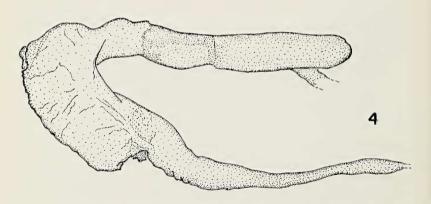


Fig. 4 L. vanduzeei, inflated aedeagus of male genitalia. Same data as preceeding.

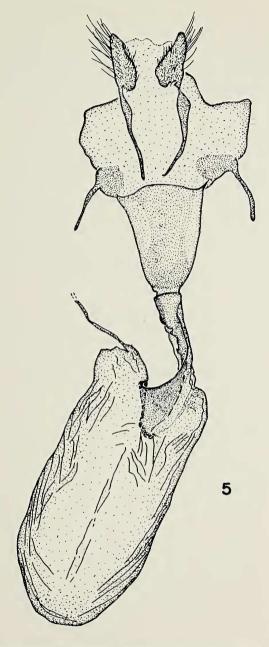


Fig. 5 L. vanduzeei, female genitalia. Same data as in fig. 2 (Bauer-Buckett slide No. 66D11-2).

glossy, pinkish-brown; veins faintly outlined in dark brown; fringes lighter than rest of wing; ventral surface lighter than dorsal surface; discal mark more prominent; exterior line faint, represented in dark brown. Abdomen dorsally clothed in pinkish and brown scales and hairs, terminal-laterally clothed in fawn brown simple hairs; ventrally appearing pinker than dorsal surface. Greatest expanse of forewing 19 mm. Genitalia as in figs. 3 and 4.

Female: As in male but slightly darker; antennae setose-ciliate; ventral surface of wings brighter than in male; otherwise as in male. Greatest expanse of forewing 20 mm. Genitalia as in fig. 5.

Specimens examined: All specimens collected at Carmel, Monterey County, California. Holotype female (No. 2565, California Academy of Sciences, San Francisco), 27 January 1926 (L. S. Slevin); 1 female, 26 January 1931 (L. S. S.); 2 males, 4 April 1965 (R. H. Leuschner), one with label "Bauer-Buckett slide No. 66D11-1"; 1 female, 30 December 1962 (R. H. L.) with label "Bauer-Buckett slide No. 66D11-2."

We would like to extend our appreciation to Mr. William R. Bauer for the excellent preparation of the genitalia slides. Illustrations were drawn by aid of a bioscope and corrections were made by use of a dissecting microscope. Illustrations were drawn to the same scale, and were prepared by the first author.

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